where scleral ablation will increase the accommodation of the ciliary muscle by the increase of the flexibility in the laser-ablated areas.

It is yet another objective of the present system to provide the appropriate scanning patterns which will cause effective ciliary body contraction and expansion of the zonules and the corneal lens based upon a theory different from the prior art.

a6

It is yet another objective of the present system to provide a new mechanism which supports the clinical results of laser presbyopia correction with minimum regression. One important concept proposed in the present system is to support the post-operative results which show minimum regression when presbyopia is corrected by a laser ablation of the sclera tissue. We proposed that the laser ablated sclera tissue "gap" is filled in by the sub-conjunctiva tissue within a few days after the surgery. This filled-in sub-conjunctiva tissue is much more flexible than the original sclera tissue. Therefore the flexible filled-in gap in the sclera area will allow the ciliary body to contract and cause the zonular fiber and the corneal lens to adjust its focusing power and increase the accommodation of the presbyopic patient.

Please replace the two paragraphs beginning on page 4, line 28 with the following:

Figure 2 is a schematic of a scleral ablation area outside the limbus.

Figure 3 is a schematic of the structure of an eye including the conjunctiva, sub-conjunctiva and scleral area ablated by laser.

a7

Please replace the paragraph beginning on page 4, line 34 with the following:

Figure 1 shows the lens of a human eye 12 connected to the scleral tissue 13 and the ciliary body 14 by zonule fibers 15. The lens power is adjusted by contraction and expansion of the ciliary muscle 14 and the movement of the zonular fiber 15 connected to the lens 12.

a8

IN THE CLAIMS:

Please cancel Claim 2 without prejudice or disclaimer.

Please amend Claim 1 such that Claims 1-17 read as follows:

1. (Amended) A laser beam ophthalmic surgery method for treating presbyopic patient by removing a portion of the scleral tissue of an eye in a predetermined pattern and area, whereby the accommodation of the presbyopic eye increases via the movement of the ciliary body and zonular fiber connected to the lens of the eye, and said movement of the ciliary body is provided by the increase of the flexibility of said laser beam ablated scleral tissue which is filled in by sub-conjunctival tissue.

2. (Canceled)

3. A laser beam ophthalmic surgery method for treating presbyopic patient by removing a portion of the scleral tissue of an eye in accordance with claim 1 in which said predetermined pattern includes at least 3 radial lines around the area of the cornea outside the limbus and each radial line has a dimension of about (0.1 - 1.0) mm in width and (2.0 - 5.0) mm in length.

4. A laser beam ophthalmic surgery method for treating presbyopic patient by removing a portion of the scleral tissue of an eye in accordance with claim 1 in which said predetermined area defined by the area outside the limbus and between two circles having diameter of about 10 mm and 18 mm.

5. A laser beam ophthalmic surgery method for treating presbyopic patient by removing a portion of the scleral tissue of an eye in accordance with claim 1 in which said predetermined pattern includes at least 3 curved lines around the area of the cornea outside the limbus.

6. A laser beam ophthalmic surgery method for treating presbyopic patient by removing a portion of the scleral tissue of an eye in accordance with claim 1 in which said predetermined pattern includes a dotted ring pattern around the area of the cornea outside the limbus and each dot has a size of about (0.1 - 2.0) mm in diameter.

7. A laser beam ophthalmic surgery method for treating presbyopic patient by removing a portion of the scleral tissue of an eye in accordance with claim 1 in which said predetermined pattern is generated by a scanning mechanism.

8. A laser beam ophthalmic surgery method for treating presbyopic patient by removing a portion of the scleral tissue of an eye in accordance with claim 1 in which said predetermined pattern is generated by a fiber-coupled device.

9. A laser beam ophthalmic surgery method for treating presbyopic patient by removing a portion of the scleral tissue of an eye in accordance with claim 1 in which said predetermined pattern is generated by a translation device.

10. A laser beam ophthalmic surgery method for treating presbyopic patient by removing a portion of the scleral tissue of an eye in accordance with claim 1 in which said predetermined pattern is generated by a mask which is non-transparent to the said laser beam.

11. A laser beam ophthalmic surgery method for treating presbyopic patient by removing a portion of the scleral tissue of an eye in accordance with claim 1 in which said laser beam is a ultraviolet laser having a predetermined wavelength of about (0.15 - 0.36) microns.

12. A laser beam ophthalmic surgery method for treating presbyopic patient by removing a portion of the scleral tissue of an eye in accordance with claim 1 in which said laser beam is an infrared laser having a predetermined wavelength of about (0.9 - 6.0) microns.

13. A laser beam ophthalmic surgery method for treating presbyopic patient by removing a portion of the scleral tissue of an eye in accordance with claim 1 in which said laser beam is a short pulse solid state laser having a predetermined wavelength of about (0.5 - 1.4) microns and a pulse width of about one femtosecond to one nanoseconds.

14. A laser beam ophthalmic surgery method for treating presbyopic patient by removing a portion of the scleral tissue of an eye in accordance with claim 1 in which said laser beam is delivered to said predetermined area of the cornea by an optical fiber.

15. A laser beam ophthalmic surgery method for treating presbyopic patient by removing a portion of the scleral tissue of an eye in accordance with claim 1 in which said scleral tissue is ablated by said laser beam after the conjunctiva is open.

16. A laser beam ophthalmic surgery method for treating presbyopic patient by removing a portion of the scleral tissue of an eye in accordance with claim 1 in which said scleral tissue is ablated by said laser beam without opening the conjunctiva.

17. A laser beam ophthalmic surgery method for treating presbyopic patient by removing a portion of the scleral tissue of an eye in accordance with claim 12 in which said laser beam is tightly focused to a spot size of about (1-500) microns to selectively remove the sclera tissue underneath the conjunctiva layer.

Please add new Claims 18 - 20 as follows:

18. (New) A laser beam ophthalmic surgery method for treating a presbyopic eye, comprising incising a portion of the scleral tissue of the eye through ablation to a depth of 300 - 630 microns and to a width of 0.1 - 2.0 millimeters to increase the accommodation of the eye by using an ablative laser which outputs pulses of light having a wavelength in the range of 150 - 350 nanometers or in the range of 2.6 - 3.2 microns, said pulses each having an energy of 0.1 - 30.0 milli-Joules and a pulse duration of 100 nanoseconds to 500 microseconds, said wavelength, energy and pulse duration being selected to incise the scleral tissue without causing significant thermal damage to the surrounding tissue.

G 10

19. (New) A laser beam ophthalmic surgery method as in Claim 18 wherein the accommodation of the eye is increased via the movement of the ciliary body and zonular fiber connected to the lens of the eye.

20. (New) A laser beam ophthalmic surgery method as in Claim 18 wherein the wavelength, energy and pulse duration are selected so as to not cut the scleral tissue through to the choroid layer.

COMMENTS

With the above amendment, Claims 1 and 3-20 are pending in this application and Applicant respectfully requests the Examiner to reconsider these claims in view of the foregoing amendments and the following comments. The Applicant would like to thank the Examiner for the indication of allowable subject matter in Claims 2-4 and 6. With the enclosed amendments the Applicant has amended Claim 1 to include the limitations of Claim 2 as initially filed, and has canceled Claim 2. The above-identified amendments are better understood with reference to the attached pages entitled **VERSION WITH MARKINGS SHOWING CHANGES**, in which deleted matter is indicated using bracketing ("**[deleted matter]**") and inserted matter is indicated using underlining ("inserted matter").

Response to Objection to the Specification

The Examiner has objected to the disclosure of the specification because of certain informalities, including typographical errors. With the amendments to the specification made above, the Applicant has corrected the specific typographical errors noted by the Examiner, as